

ABSTRACT

A cooling load 90 is enclosed within the envelope of the pressure vessel that contains the working fluid in a pulse tube cooler in a load space 95 adjacent to a regenerator 58 of that pulse tube cooler. Flow-smoothing means 63, which include stacked screens and perforated plates, or diffuser nozzle 104 or diffuser cone 106, spreads the flow of fluid that enters the cold end of pulse tube 66.